Matthieu TRISTRAM
December 2023

tristram@ijclab.in2p3.fr
https://users.lal.in2p3.fr/tristram

Publications

Nombre de publications: 196
Metrics: 99 h-index, 99 i-100, 186 i-10 (ref. ADS, dec. 2023)
Total citations: 55187

(Archeops papers) During my PhD thesis, I have actively participated in the analysis and writing of the Archeops collaboration papers. **I am first author of the latest version of the power spectra estimated from the Archeops balloon data** [215] (*47 citations*).

(Planck Early Results) In January 2010, Planck released a first series of results based on a point source catalog with 26 scientific papers which I am signing. In addition to the production of the calibrated maps used to extract all those results, I was involved in the description of the catalog of Galaxy clusters detected by SZ effect [176]. I was also involved in the study of the Cosmic Infrared Background emission [186] which describes the diffusion emission from all unresolved galaxies. The data treatment for this first Planck release is detailed in [195].

(Planck 2013 Results Papers) In the spring of 2013, Planck published a set of 31 scientific papers gathering the first cosmological results as well as the data analysis associated for the period covering the *nominal* mission (the 16 first months of observation). I was actively involved in the writing of this release both as writer but also as internal reviewer. As for the previous releases of Planck data, I have produced all the sky maps for the Planck-HFI frequency channels used for the analysis. In addition, **I have been actively involved in the redaction of the paper describing the CMB likelihood [131] (*619 citations*) and the cosmological results** [132] (*7521 citations*). I have also been involved in the writing of the paper describing the data treatment [122] and **I was co-leading the paper for the map calibration** [124] (*118 citations*).

(Planck 2015 Results Papers) Beginning of 2015, Planck published a set of 28 scientific papers gathering the cosmological and astrophysical results based on the entire data set (4.5 survey) in temperature and polarisation. **I have acted as internal referee for many papers of this release.** Together with Olivier Perdereau, we produced all the sky maps for the Planck-HFI frequency channels used in this release and **I leaded the paper describing the map-making and calibration procedure associated** [56] (*244 citations*). In addition, I participated to the **likelihood analysis with a dedicated CMB likelihood for high multipoles** [58] (*787 citations*) and to **the cosmological interpretation** [60] (*11049 citations*). In the latter, I provided the first constraint on the tensor-to-scalar ratio r based on the B-mode polarized power spectrum.

(Planck Intermediate Papers) Papers outside of the official Planck releases are designated as "intermediate" papers. In 2014, together with the CMB group at LAL, I participated to the paper describing the cosmological constraints using a Frequentist approach based on the "profile likelihoods" [150] (*90 citations*). In 2016, I was **leading the paper on the constraints on the reionization history** [84] (*417 citations*).

(Algorithms) All along my career, I have studied and developed algorithms for statistical analysis and CMB exploitation. In particular, I published several papers around angular power spectrum reconstructions [41, 154, 168, 206, 214]. With two of my post-docs, I developed CMB likelihood approximations for the small angular scales [43] and the large angular scales [98]. More recently, with Thibaut Louis, we studied how to increase statistical significance by correlating two different CMB experiments [32], and developed an estimator for the correlation between temperature T and polarization E of CMB anisotropies [33].

(Cosmologie) From the beginning of my career, I studied the physics of the primordial Universe and the reheating post-inflation [207]. In between 2016 and 2019, with the CMB group at LAL, we have published a series of 4 papers [30, 44, 43, 42] giving constraints on the cosmological model and its extensions (with particular focus on the neutrino sector) for which I have actively participated to **the data production, data treatment, scientific interpretation and writing**. In 2021, I have published a paper on **Planck constraints on primordial gravitational waves** [19] which was then followed in 2022 by a **PRL paper which gives the best upper-limit on the tensor-to-scalar ratio to date** [15]. In 2023, I published the constraints on cosmological parameters using full PR4 data including both large scales and small scales [8].

[1] **LiteBIRD Science Goals and Forecasts. A Case Study of the Origin of Primordial Gravitational Waves using Large-Scale CMB Polarization**.
P. Campeti et al., arXiv e-prints, arXiv:2312.00717. 2312.00717, December 2023

[2] **Robustness of cosmic birefringence measurement against Galactic foreground emission and instrumental systematics**.
P. Diego-Palazuelos et al., J. Cosmology Astropart. Phys., 2023, 1, 044. 2210.07655, January 2023

[3] **Tensor-to-scalar ratio forecasts for extended LiteBIRD frequency configurations**.
U. Fuskeland et al., A&A, 676, A42. 2302.05228, August 2023

[4] **Sensitivity Modeling for LiteBIRD**.
T. Hasebe et al., Journal of Low Temperature Physics, 211, 5-6, 384. June 2023

[5] **Probing cosmic inflation with the LiteBIRD cosmic microwave background polarization survey**.
LiteBIRD Collaboration et al., Progress of Theoretical and Experimental Physics, 2023, 4, 042F01. 2202.02773, April 2023

[6] **LiteBIRD Science Goals and Forecasts: A full-sky measurement of gravitational lensing of the CMB**.
A. I. Lonappan et al., arXiv e-prints, arXiv:2312.05184. 2312.05184, December 2023

[7] **LiteBIRD Science Goals and Forecasts: Improving Sensitivity to Inflationary Gravitational Waves with Multitracer Delensing**.
T. Namikawa et al., arXiv e-prints, arXiv:2312.05194. 2312.05194, December 2023

[8] **Cosmological parameters derived from the final (PR4) Planck data release**.
M. Tristram et al., arXiv e-prints, arXiv:2309.10034. 2309.10034, September 2023

[9] **CMB-S4: Forecasting Constraints on Primordial Gravitational Waves**.
K. Abazajian et al., ApJ, 926, 1, 54. 2008.12619, February 2022

[10] **Snowmass 2021 CMB-S4 White Paper**.
K. Abazajian et al., arXiv e-prints, arXiv:2203.08024. 2203.08024, March 2022

[11] **Cosmic backgrounds from the radio to the far-infrared: Recent results and perspectives from cosmological and astrophysical surveys**.
C. Burigana et al., International Journal of Modern Physics D, 31, 7, 2230012. 2111.11472, January 2022

[12] **Snowmass2021 Cosmic Frontier: Cosmic Microwave Background Measurements White Paper**.
C. L. Chang et al., arXiv e-prints, arXiv:2203.07638. 2203.07638, March 2022

[13] **Cosmic Birefringence from the Planck Data Release 4**.
P. Diego-Palazuelos et al., Phys. Rev. Lett., 128, 9, 091302. 2201.07682, March 2022

[14] **In-flight polarization angle calibration for LiteBIRD: blind challenge and cosmological implications**.
N. Krachmalnicoff et al., J. Cosmology Astropart. Phys., 2022, 1, 039. 2111.09140, January 2022

[15] **Improved limits on the tensor-to-scalar ratio using BICEP and Planck data**.
M. Tristram et al., Phys. Rev. D, 105, 8, 083524. 2112.07961, April 2022

[16] **Polarization angle requirements for CMB B-mode experiments. Application to the LiteBIRD satellite**.
P. Vielva et al., J. Cosmology Astropart. Phys., 2022, 4, 029. 2202.01324, April 2022

[17] **Cosmology with the Planck T -E correlation coefficient**.
A. La Posta, T. Louis, X. Garrido, M. Tristram and S. Henrot-Versillé, Phys. Rev. D, 104, 2, 023527. 2105.06167, July 2021

[18] **Concept Design of Low Frequency Telescope for CMB B-mode Polarization satellite LiteBIRD**.
Y. Sekimoto et al., arXiv e-prints, arXiv:2101.06342. 2101.06342, January 2021

[19] **Planck constraints on the tensor-to-scalar ratio**.
M. Tristram et al., A&A, 647, A128. 2010.01139, March 2021

[20] **LiteBIRD satellite: JAXA's new strategic L-class mission for all-sky surveys of cosmic microwave background polarization**.
M. Hazumi et al. In M. Lystrup and M. D. Perrin (Editors), Space Telescopes and Instrumentation 2020: Optical, Infrared, and Millimeter Wave, volume 11443 of **Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series**, 114432F. December 2020. 2101.12449

[21] **Overview of the medium and high frequency telescopes of the LiteBIRD space mission**.
L. Montier et al. In M. Lystrup and M. D. Perrin (Editors), Space Telescopes and Instrumentation 2020: Optical, Infrared, and Millimeter Wave, volume 11443 of **Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series**, 114432G. December 2020. 2102.00809

[22] **Planck 2018 results. III. High Frequency Instrument data processing and frequency maps**.
Planck Collaboration et al., A&A, 641, A3. 1807.06207, September 2020

[23] **Planck intermediate results. LVII. Joint Planck LFI and HFI data processing**.
Planck Collaboration et al., A&A, 643, A42. 2007.04997, November 2020

[24] **Concept design of low frequency telescope for CMB B-mode polarization satellite LiteBIRD**.
Y. Sekimoto et al. In J. Zmuidzinas and J.-R. Gao (Editors), Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy X, volume 11453 of **Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series**, 1145310. December 2020

[25] **Updated Design of the CMB Polarization Experiment Satellite LiteBIRD**.
H. Sugai et al., Journal of Low Temperature Physics, 199, 3-4, 1107. 2001.01724, January 2020

[26] **CMB-S4 Science Case, Reference Design, and Project Plan**.
K. Abazajian et al., arXiv e-prints, arXiv:1907.04473. 1907.04473, July 2019

[27] **CMB-S4**.
J. Carlstrom et al. In Bulletin of the American Astronomical Society, volume 51, 209. September 2019. 1908.01062

[28] **Messengers from the Early Universe: Cosmic Neutrinos and Other Light Relics**.
D. Green et al., BAAS, 51, 3, 159. 1903.04763, May 2019

[29] **LiteBIRD: A Satellite for the Studies of B-Mode Polarization and Inflation from Cosmic Background Radiation Detection**.
M. Hazumi et al., Journal of Low Temperature Physics, 194, 5-6, 443. March 2019

[30] **Comparison of results on N_{eff} from various Planck likelihoods**.
S. Henrot-Versillé, F. Couchot, X. Garrido, H. Imada, T. Louis, M. Tristram and S. Vanneste, A&A, 623, A9. 1807.05003, March 2019

[31] **LiteBIRD: an all-sky cosmic microwave background probe of inflation**.
A. Lee et al. In Bulletin of the American Astronomical Society, volume 51, 286. September 2019

[32] **Consistency of CMB experiments beyond cosmic variance**.
T. Louis, X. Garrido, A. Soussana, M. Tristram, S. Henrot-Versillé and S. Vanneste, Phys. Rev. D, 100, 2, 023518. 1905.06864, July 2019

[33] **TE correlation coefficient of Planck legacy data**.
T. Louis, Z. Li and M. Tristram, Phys. Rev. D, 100, 10, 103534. 1909.03967, November 2019

[34] **The need for better tools to design future CMB experiments**.
G. Rocha et al. In Bulletin of the American Astronomical Society, volume 51, 221. September 2019. 1908.01907

[35] **Exploring cosmic origins with CORE: Survey requirements and mission design**.
J. Delabrouille et al., J. Cosmology Astropart. Phys., 2018, 4, 014. 1706.04516, April 2018

[36] **Exploring cosmic origins with CORE: Mitigation of systematic effects**.
P. Natoli et al., J. Cosmology Astropart. Phys., 2018, 4, 022. 1707.04224, April 2018

[37] **Planck intermediate results. LIII. Detection of velocity dispersion from the kinetic Sunyaev-Zeldovich effect**.
Planck Collaboration et al., A&A, 617, A48. 1707.00132, September 2018

[38] **Planck intermediate results. XV. A study of anomalous microwave emission in Galactic clouds (Corrigendum)**.
Planck Collaboration et al., A&A, 610, C1. February 2018

[39] **Concept design of the LiteBIRD satellite for CMB B-mode polarization**.
Y. Sekimoto et al. In M. Lystrup, H. A. MacEwen, G. G. Fazio, N. Batalha, N. Siegler and E. C. Tong (Editors), Space Telescopes and Instrumentation 2018: Optical, Infrared, and Millimeter Wave, volume 10698 of **Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series**, 106981Y. August 2018

[40] **The LiteBIRD Satellite Mission: Sub-Kelvin Instrument**.
A. Suzuki et al., Journal of Low Temperature Physics, 193, 5-6, 1048. 1801.06987, December 2018

[41] **Quadratic estimator for CMB cross-correlation**.
S. Vanneste, S. Henrot-Versillé, T. Louis and M. Tristram, Phys. Rev. D, 98, 10, 103526. 1807.02484, November 2018

[42] **Cosmological constraints on the neutrino mass including systematic uncertainties**.
F. Couchot, S. Henrot-Versillé, O. Perdereau, S. Plaszczynski, B. Rouillé d'Orfeuil, M. Spinelli and M. Tristram, A&A, 606, A104. 1703.10829, October 2017

[43] **Cosmology with the cosmic microwave background temperature-polarization correlation**.
F. Couchot, S. Henrot-Versillé, O. Perdereau, S. Plaszczynski, B. Rouillé d'Orfeuil, M. Spinelli and M. Tristram, A&A, 602, A41. 1609.09730, June 2017

[44] **Relieving tensions related to the lensing of the cosmic microwave background temperature power spectra**.
F. Couchot, S. Henrot-Versillé, O. Perdereau, S. Plaszczynski, B. Rouillé d'Orfeuil, M. Spinelli and M. Tristram, A&A, 597, A126. 1510.07600, January 2017

[45] **Planck intermediate results. L. Evidence of spatial variation of the polarized thermal dust spectral energy distribution and implications for CMB B-mode analysis**.
Planck Collaboration et al., A&A, 599, A51. 1606.07335, March 2017

[46] **Planck intermediate results. LI. Features in the cosmic microwave background temperature power spectrum and shifts in cosmological parameters**.
Planck Collaboration et al., A&A, 607, A95. 1608.02487, November 2017

[47] **Planck intermediate results. LII. Planet flux densities**.
Planck Collaboration et al., A&A, 607, A122. 1612.07151, November 2017

[48] **Planck 2015 results. I. Overview of products and scientific results**.
Planck Collaboration et al., A&A, 594, A1. 1502.01582, September 2016

[49] **Planck 2015 results. II. Low Frequency Instrument data processings**.
Planck Collaboration et al., A&A, 594, A2. 1502.01583, September 2016

[50] **Planck 2015 results. III. LFI systematic uncertainties**.
Planck Collaboration et al., A&A, 594, A3. 1507.08853, September 2016

[51] **Planck 2015 results. IV. Low Frequency Instrument beams and window functions**.
Planck Collaboration et al., A&A, 594, A4. 1502.01584, September 2016

[52] **Planck 2015 results. IX. Diffuse component separation: CMB maps**.
Planck Collaboration et al., A&A, 594, A9. 1502.05956, September 2016

[53] **Planck 2015 results. V. LFI calibration**.
Planck Collaboration et al., A&A, 594, A5. 1505.08022, September 2016

[54] **Planck 2015 results. VI. LFI mapmaking**.
Planck Collaboration et al., A&A, 594, A6. 1502.01585, September 2016

[55] **Planck 2015 results. VII. High Frequency Instrument data processing: Time-ordered information and beams**.
Planck Collaboration et al., A&A, 594, A7. 1502.01586, September 2016

[56] **Planck 2015 results. VIII. High Frequency Instrument data processing: Calibration and maps**.
Planck Collaboration et al., A&A, 594, A8. 1502.01587, September 2016

[57] **Planck 2015 results. X. Diffuse component separation: Foreground maps**.
Planck Collaboration et al., A&A, 594, A10. 1502.01588, September 2016

[58] **Planck 2015 results. XI. CMB power spectra, likelihoods, and robustness of parameters**.
Planck Collaboration et al., A&A, 594, A11. 1507.02704, September 2016

[59] **Planck 2015 results. XII. Full focal plane simulations**.
Planck Collaboration et al., A&A, 594, A12. 1509.06348, September 2016

[60] **Planck 2015 results. XIII. Cosmological parameters**.
Planck Collaboration et al., A&A, 594, A13. 1502.01589, September 2016

[61] **Planck 2015 results. XIV. Dark energy and modified gravity**.
Planck Collaboration et al., A&A, 594, A14. 1502.01590, September 2016

[62] **Planck 2015 results. XIX. Constraints on primordial magnetic fields**.
Planck Collaboration et al., A&A, 594, A19. 1502.01594, September 2016

[63] **Planck 2015 results. XV. Gravitational lensing**.
Planck Collaboration et al., A&A, 594, A15. 1502.01591, September 2016

[64] **Planck 2015 results. XVI. Isotropy and statistics of the CMB**.
Planck Collaboration et al., A&A, 594, A16. 1506.07135, September 2016

[65] **Planck 2015 results. XVII. Constraints on primordial non-Gaussianity**.
Planck Collaboration et al., A&A, 594, A17. 1502.01592, September 2016

[66] **Planck 2015 results. XVIII. Background geometry and topology of the Universe**.
Planck Collaboration et al., A&A, 594, A18. 1502.01593, September 2016

[67] **Planck 2015 results. XX. Constraints on inflation**.
Planck Collaboration et al., A&A, 594, A20. 1502.02114, September 2016

[68] **Planck 2015 results. XXI. The integrated Sachs-Wolfe effect**.
Planck Collaboration et al., A&A, 594, A21. 1502.01595, September 2016

[69] **Planck 2015 results. XXII. A map of the thermal Sunyaev-Zeldovich effect**.
Planck Collaboration et al., A&A, 594, A22. 1502.01596, September 2016

[70] **Planck 2015 results. XXIII. The thermal Sunyaev-Zeldovich effect-cosmic infrared background correlation**.
Planck Collaboration et al., A&A, 594, A23. 1509.06555, September 2016

[71] **Planck 2015 results. XXIV. Cosmology from Sunyaev-Zeldovich cluster counts**.
Planck Collaboration et al., A&A, 594, A24. 1502.01597, September 2016

[72] **Planck 2015 results. XXV. Diffuse low-frequency Galactic foregrounds**.
Planck Collaboration et al., A&A, 594, A25. 1506.06660, September 2016

[73] **Planck 2015 results. XXVI. The Second Planck Catalogue of Compact Sources**.
Planck Collaboration et al., A&A, 594, A26. 1507.02058, September 2016

[74] **Planck 2015 results. XXVII. The second Planck catalogue of Sunyaev-Zeldovich sources**.
Planck Collaboration et al., A&A, 594, A27. 1502.01598, September 2016

[75] **Planck 2015 results. XXVIII. The Planck Catalogue of Galactic cold clumps**.
Planck Collaboration et al., A&A, 594, A28. 1502.01599, September 2016

[76] **Planck intermediate results. XL. The Sunyaev-Zeldovich signal from the Virgo cluster**.
Planck Collaboration et al., A&A, 596, A101. 1511.05156, December 2016

[77] **Planck intermediate results. XLI. A map of lensing-induced B-modes**.
Planck Collaboration et al., A&A, 596, A102. 1512.02882, December 2016

[78] **Planck intermediate results. XLII. Large-scale Galactic magnetic fields**.
Planck Collaboration et al., A&A, 596, A103. 1601.00546, December 2016

[79] **Planck intermediate results. XLIII. Spectral energy distribution of dust in clusters of galaxies**.
Planck Collaboration et al., A&A, 596, A104. 1603.04919, December 2016

[80] **Planck intermediate results. XLIV. Structure of the Galactic magnetic field from dust polarization maps of the southern Galactic cap**.
Planck Collaboration et al., A&A, 596, A105. 1604.01029, December 2016

[81] **Planck intermediate results. XLIX. Parity-violation constraints from polarization data**.
Planck Collaboration et al., A&A, 596, A110. 1605.08633, December 2016

[82] **Planck intermediate results. XLV. Radio spectra of northern extragalactic radio sources**.
Planck Collaboration et al., A&A, 596, A106. 1606.05120, December 2016

[83] **Planck intermediate results. XLVI. Reduction of large-scale systematic effects in HFI polarization maps and estimation of the reionization optical depth**.
Planck Collaboration et al., A&A, 596, A107. 1605.02985, December 2016

[84] **Planck intermediate results. XLVII. Planck constraints on reionization history**.
Planck Collaboration et al., A&A, 596, A108. 1605.03507, December 2016

[85] **Planck intermediate results. XLVIII. Disentangling Galactic dust emission and cosmic infrared background anisotropies**.
Planck Collaboration et al., A&A, 596, A109. 1605.09387, December 2016

[86] **Planck intermediate results. XXIX. All-sky dust modelling with Planck, IRAS, and WISE observations**.
Planck Collaboration et al., A&A, 586, A132. 1409.2495, February 2016

[87] **Planck intermediate results. XXX. The angular power spectrum of polarized dust emission at intermediate and high Galactic latitudes**.
Planck Collaboration et al., A&A, 586, A133. 1409.5738, February 2016

[88] **Planck intermediate results. XXXI. Microwave survey of Galactic supernova remnants**.
Planck Collaboration et al., A&A, 586, A134. 1409.5746, February 2016

[89] **Planck intermediate results. XXXII. The relative orientation between the magnetic field and structures traced by interstellar dust**.
Planck Collaboration et al., A&A, 586, A135. 1409.6728, February 2016

[90] **Planck intermediate results. XXXIII. Signature of the magnetic field geometry of interstellar filaments in dust polarization maps**.
Planck Collaboration et al., A&A, 586, A136. 1411.2271, February 2016

[91] **Planck intermediate results. XXXIV. The magnetic field structure in the Rosette Nebula**.
Planck Collaboration et al., A&A, 586, A137. 1501.00922, February 2016

[92] **Planck intermediate results. XXXIX. The Planck list of high-redshift source candidates**.
Planck Collaboration et al., A&A, 596, A100. 1508.04171, December 2016

[93] **Planck intermediate results. XXXV. Probing the role of the magnetic field in the formation of structure in molecular clouds**.
Planck Collaboration et al., A&A, 586, A138. 1502.04123, February 2016

[94] **Planck intermediate results. XXXVI. Optical identification and redshifts of Planck SZ sources with telescopes at the Canary Islands observatories**.
Planck Collaboration et al., A&A, 586, A139. 1504.04583, February 2016

[95] **Planck intermediate results. XXXVIII. E- and B-modes of dust polarization from the magnetized filamentary structure of the interstellar medium**.
Planck Collaboration et al., A&A, 586, A141. 1505.02779, February 2016

[96] **Joint Analysis of BICEP2/Keck Array and Planck Data**.
BICEP2/Keck Collaboration et al., Phys. Rev. Lett., 114, 10, 101301. 1502.00612, March 2015

[97] **Improved constraint on the primordial gravitational-wave density using recent cosmological data and its impact on cosmic string models**.
S. Henrot-Versillé et al., Classical and Quantum Gravity, 32, 4, 045003. 1408.5299, February 2015

[98] **Large-scale cosmic microwave background temperature and polarization cross-spectra likelihoods**.
A. Mangilli, S. Plaszczynski and M. Tristram, MNRAS, 453, 3, 3174. 1503.01347, November 2015

[99] **Polarization measurement analysis. I. Impact of the full covariance matrix on polarization fraction and angle measurements**.
L. Montier, S. Plaszczynski, F. Levrier, M. Tristram, D. Alina, I. Ristorcelli and J. P. Bernard, A&A, 574, A135. 1406.6536, February 2015

[100] **Polarization measurement analysis. II. Best estimators of polarization fraction and angle**.
L. Montier, S. Plaszczynski, F. Levrier, M. Tristram, D. Alina, I. Ristorcelli, J. P. Bernard and V. Guillet, A&A, 574, A136. 1407.0178, February 2015

[101] **Planck 2013 results. XXXII. The updated Planck catalogue of Sunyaev-Zeldovich sources**.
Planck Collaboration et al., A&A, 581, A14. 1502.00543, September 2015

[102] **Planck intermediate results. XIX. An overview of the polarized thermal emission from Galactic dust**.
Planck Collaboration et al., A&A, 576, A104. 1405.0871, April 2015

[103] **Planck intermediate results. XVIII. The millimetre and sub-millimetre emission from planetary nebulae**.
Planck Collaboration et al., A&A, 573, A6. 1403.4723, January 2015

[104] **Planck intermediate results. XX. Comparison of polarized thermal emission from Galactic dust with simulations of MHD turbulence**.
Planck Collaboration et al., A&A, 576, A105. 1405.0872, April 2015

[105] **Planck intermediate results. XXI. Comparison of polarized thermal emission from Galactic dust at 353 GHz with interstellar polarization in the visible**.
Planck Collaboration et al., A&A, 576, A106. 1405.0873, April 2015

[106] **Planck intermediate results. XXII. Frequency dependence of thermal emission from Galactic dust in intensity and polarization**.
Planck Collaboration et al., A&A, 576, A107. 1405.0874, April 2015

[107] **Planck intermediate results. XXIII. Galactic plane emission components derived from Planck with ancillary data**.
Planck Collaboration et al., A&A, 580, A13. 1406.5093, August 2015

[108] **Planck intermediate results. XXIV. Constraints on variations in fundamental constants**.
Planck Collaboration et al., A&A, 580, A22. 1406.7482, August 2015

[109] **Planck intermediate results. XXV. The Andromeda galaxy as seen by Planck**.
Planck Collaboration et al., A&A, 582, A28. 1407.5452, October 2015

[110] **Planck intermediate results. XXVI. Optical identification and redshifts of Planck clusters with the RTT150 telescope**.
Planck Collaboration et al., A&A, 582, A29. 1407.6663, October 2015

[111] **Planck intermediate results. XXVII. High-redshift infrared galaxy overdensity candidates and lensed sources discovered by Planck and confirmed by Herschel-SPIRE**.
Planck Collaboration et al., A&A, 582, A30. 1503.08773, October 2015

[112] **Planck intermediate results. XXVIII. Interstellar gas and dust in the Chamaeleon clouds as seen by Fermi LAT and Planck**.
Planck Collaboration et al., A&A, 582, A31. 1409.3268, October 2015

[113] **PRISM (Polarized Radiation Imaging and Spectroscopy Mission): an extended white paper**.
P. André et al., J. Cosmology Astropart. Phys., 2014, 2, 006. 1310.1554, February 2014

[114] **EBEX: A Balloon-Borne CMB Polarization Experiment**.
D. Chapman et al. In American Astronomical Society Meeting Abstracts #223, volume 223 of **American Astronomical Society Meeting Abstracts**, 407.03. January 2014

[115] **The performance of the bolometer array and readout system during the 2012/2013 flight of the E and B experiment (EBEX)**.
K. MacDermid et al. In W. S. Holland and J. Zmuidzinas (Editors), Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VII, volume 9153 of **Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series**, 915311. July 2014. 1407.6894

[116] **Planck 2013 results. I. Overview of products and scientific results**.
Planck Collaboration et al., A&A, 571, A1. 1303.5062, November 2014

[117] **Planck 2013 results. II. Low Frequency Instrument data processing**.
Planck Collaboration et al., A&A, 571, A2. 1303.5063, November 2014

[118] **Planck 2013 results. III. LFI systematic uncertainties**.
Planck Collaboration et al., A&A, 571, A3. 1303.5064, November 2014

[119] **Planck 2013 results. IV. Low Frequency Instrument beams and window functions**.
Planck Collaboration et al., A&A, 571, A4. 1303.5065, November 2014

[120] **Planck 2013 results. IX. HFI spectral response**.
Planck Collaboration et al., A&A, 571, A9. 1303.5070, November 2014

[121] **Planck 2013 results. V. LFI calibration**.
Planck Collaboration et al., A&A, 571, A5. 1303.5066, November 2014

[122] **Planck 2013 results. VI. High Frequency Instrument data processing**.
Planck Collaboration et al., A&A, 571, A6. 1303.5067, November 2014

[123] **Planck 2013 results. VII. HFI time response and beams**.
Planck Collaboration et al., A&A, 571, A7. 1303.5068, November 2014

[124] **Planck 2013 results. VIII. HFI photometric calibration and mapmaking**.
Planck Collaboration et al., A&A, 571, A8. 1303.5069, November 2014

[125] **Planck 2013 results. X. HFI energetic particle effects: characterization, removal, and simulation**.
Planck Collaboration et al., A&A, 571, A10. 1303.5071, November 2014

[126] **Planck 2013 results. XI. All-sky model of thermal dust emission**.
Planck Collaboration et al., A&A, 571, A11. 1312.1300, November 2014

[127] **Planck 2013 results. XII. Diffuse component separation**.
Planck Collaboration et al., A&A, 571, A12. 1303.5072, November 2014

[128] **Planck 2013 results. XIII. Galactic CO emission**.
Planck Collaboration et al., A&A, 571, A13. 1303.5073, November 2014

[129] **Planck 2013 results. XIV. Zodiacal emission**.
Planck Collaboration et al., A&A, 571, A14. 1303.5074, November 2014

[130] **Planck 2013 results. XIX. The integrated Sachs-Wolfe effect**.
Planck Collaboration et al., A&A, 571, A19. 1303.5079, November 2014

[131] **Planck 2013 results. XV. CMB power spectra and likelihood**.
Planck Collaboration et al., A&A, 571, A15. 1303.5075, November 2014

[132] **Planck 2013 results. XVI. Cosmological parameters**.
Planck Collaboration et al., A&A, 571, A16. 1303.5076, November 2014

[133] **Planck 2013 results. XVII. Gravitational lensing by large-scale structure**.
Planck Collaboration et al., A&A, 571, A17. 1303.5077, November 2014

[134] **Planck 2013 results. XVIII. The gravitational lensing-infrared background correlation**.
Planck Collaboration et al., A&A, 571, A18. 1303.5078, November 2014

[135] **Planck 2013 results. XX. Cosmology from Sunyaev-Zeldovich cluster counts**.
Planck Collaboration et al., A&A, 571, A20. 1303.5080, November 2014

[136] **Planck 2013 results. XXI. Power spectrum and high-order statistics of the Planck all-sky Compton parameter map**.
Planck Collaboration et al., A&A, 571, A21. 1303.5081, November 2014

[137] **Planck 2013 results. XXII. Constraints on inflation**.
Planck Collaboration et al., A&A, 571, A22. 1303.5082, November 2014

[138] **Planck 2013 results. XXIII. Isotropy and statistics of the CMB**.
Planck Collaboration et al., A&A, 571, A23. 1303.5083, November 2014

[139] **Planck 2013 results. XXIV. Constraints on primordial non-Gaussianity**.
Planck Collaboration et al., A&A, 571, A24. 1303.5084, November 2014

[140] **Planck 2013 results. XXIX. The Planck catalogue of Sunyaev-Zeldovich sources**.
Planck Collaboration et al., A&A, 571, A29. 1303.5089, November 2014

[141] **Planck 2013 results. XXV. Searches for cosmic strings and other topological defects**.
Planck Collaboration et al., A&A, 571, A25. 1303.5085, November 2014

[142] **Planck 2013 results. XXVI. Background geometry and topology of the Universe**.
Planck Collaboration et al., A&A, 571, A26. 1303.5086, November 2014

[143] **Planck 2013 results. XXVII. Doppler boosting of the CMB: Eppur si muove**.
Planck Collaboration et al., A&A, 571, A27. 1303.5087, November 2014

[144] **Planck 2013 results. XXVIII. The Planck Catalogue of Compact Sources**.
Planck Collaboration et al., A&A, 571, A28. 1303.5088, November 2014

[145] **Planck 2013 results. XXX. Cosmic infrared background measurements and implications for star formation**.
Planck Collaboration et al., A&A, 571, A30. 1309.0382, November 2014

[146] **Planck 2013 results. XXXI. Consistency of the Planck data**.
Planck Collaboration et al., A&A, 571, A31. 1508.03375, November 2014

[147] **Planck intermediate results. XIII. Constraints on peculiar velocities**.
Planck Collaboration et al., A&A, 561, A97. 1303.5090, January 2014

[148] **Planck intermediate results. XIV. Dust emission at millimetre wavelengths in the Galactic plane**.
Planck Collaboration et al., A&A, 564, A45. 1307.6815, April 2014

[149] **Planck intermediate results. XV. A study of anomalous microwave emission in Galactic clouds**.
Planck Collaboration et al., A&A, 565, A103. 1309.1357, May 2014

[150] **Planck intermediate results. XVI. Profile likelihoods for cosmological parameters**.
Planck Collaboration et al., A&A, 566, A54. 1311.1657, June 2014

[151] **Planck intermediate results. XVII. Emission of dust in the diffuse interstellar medium from the far-infrared to microwave frequencies**.
Planck Collaboration et al., A&A, 566, A55. 1312.5446, June 2014

[152] **A novel estimator of the polarization amplitude from normally distributed Stokes parameters**.
S. Plaszczynski, L. Montier, F. Levrier and M. Tristram, MNRAS, 439, 4, 4048. 1312.0437, April 2014

[153] **Design of the detectors for EBEX, a balloon-borne cosmic microwave background polarimeter**.
B. Westbrook et al. In American Astronomical Society Meeting Abstracts #223, volume 223 of **American Astronomical Society Meeting Abstracts**, 407.04. January 2014

[154] **Efficiency of pseudospectrum methods for estimation of the cosmic microwave background B-mode power spectrum**.
A. Ferté, J. Grain, M. Tristram and R. Stompor, Phys. Rev. D, 88, 2, 023524. 1305.7441, July 2013

[155] **The E and B EXperiment EBEX**.
K. Helson et al. In American Astronomical Society Meeting Abstracts, volume 222 of **American Astronomical Society Meeting Abstracts**, 119.07. June 2013

[156] Planck Collaboration et al. **Erratum: Planck intermediate results (Corrigendum). V. Pressure profiles of galaxy clusters from the Sunyaev-Zeldovich effect**. Astronomy & Astrophysics, Volume 558, id.C2, 3 pp., October 2013

[157] **Planck intermediate results. II. Comparison of Sunyaev-Zeldovich measurements from Planck and from the Arcminute Microkelvin Imager for 11 galaxy clusters**.
Planck Collaboration et al., A&A, 550, A128. 1204.1318, February 2013

[158] **Planck intermediate results. III. The relation between galaxy cluster mass and Sunyaev-Zeldovich signal**.
Planck Collaboration et al., A&A, 550, A129. 1204.2743, February 2013

[159] **Planck intermediate results. IV. The XMM-Newton validation programme for new Planck galaxy clusters**.
Planck Collaboration et al., A&A, 550, A130. 1205.3376, February 2013

[160] **Planck intermediate results. IX. Detection of the Galactic haze with Planck**.
Planck Collaboration et al., A&A, 554, A139. 1208.5483, June 2013

[161] **Planck intermediate results. V. Pressure profiles of galaxy clusters from the Sunyaev-Zeldovich effect**.
Planck Collaboration et al., A&A, 550, A131. 1207.4061, February 2013

[162] **Planck intermediate results. VI. The dynamical structure of PLCKG214.6+37.0, a Planck discovered triple system of galaxy clusters**.
Planck Collaboration et al., A&A, 550, A132. 1207.4009, February 2013

[163] **Planck intermediate results. VII. Statistical properties of infrared and radio extragalactic sources from the Planck Early Release Compact Source Catalogue at frequencies between 100 and 857 GHz**.
Planck Collaboration et al., A&A, 550, A133. 1207.4706, February 2013

[164] **Planck intermediate results. VIII. Filaments between interacting clusters**.
Planck Collaboration et al., A&A, 550, A134. 1208.5911, February 2013

[165] **Planck intermediate results. X. Physics of the hot gas in the Coma cluster**.
Planck Collaboration et al., A&A, 554, A140. 1208.3611, June 2013

[166] **Planck intermediate results. XI. The gas content of dark matter halos: the Sunyaev-Zeldovich-stellar mass relation for locally brightest galaxies**.
Planck Collaboration et al., A&A, 557, A52. 1212.4131, September 2013

[167] **Planck intermediate results. XII: Diffuse Galactic components in the Gould Belt system**.
Planck Collaboration et al., A&A, 557, A53. 1301.5839, September 2013

[168] **CMB EB and TB cross-spectrum estimation via pseudospectrum techniques**.
J. Grain, M. Tristram and R. Stompor, Phys. Rev. D, 86, 7, 076005. 1207.5344, October 2012

[169] **Planck intermediate results. I. Further validation of new Planck clusters with XMM-Newton**.
Planck Collaboration et al., A&A, 543, A102. 1112.5595, July 2012

[170] **Estimating the tensor-to-scalar ratio and the effect of residual foreground contamination**.
Y. Fantaye, F. Stivoli, J. Grain, S. M. Leach, M. Tristram, C. Baccigalupi and R. Stompor, J. Cosmology Astropart. Phys., 2011, 8, 001. 1104.1367, August 2011

[171] **Joint 3D modelling of the polarized Galactic synchrotron and thermal dust foreground diffuse emission**.
L. Fauvet et al., A&A, 526, A145. 1003.4450, February 2011

[172] **Planck early results. I. The Planck mission**.
Planck Collaboration et al., A&A, 536, A1. 1101.2022, December 2011

[173] **Planck early results. II. The thermal performance of Planck**.
Planck Collaboration et al., A&A, 536, A2. 1101.2023, December 2011

[174] **Planck early results. IX. XMM-Newton follow-up for validation of Planck cluster candidates**.
Planck Collaboration et al., A&A, 536, A9. 1101.2025, December 2011

[175] **Planck early results. VII. The Early Release Compact Source Catalogue**.
Planck Collaboration et al., A&A, 536, A7. 1101.2041, December 2011

[176] **Planck early results. VIII. The all-sky early Sunyaev-Zeldovich cluster sample**.
Planck Collaboration et al., A&A, 536, A8. 1101.2024, December 2011

[177] **Planck early results. X. Statistical analysis of Sunyaev-Zeldovich scaling relations for X-ray galaxy clusters**.
Planck Collaboration et al., A&A, 536, A10. 1101.2043, December 2011

[178] **Planck early results. XI. Calibration of the local galaxy cluster Sunyaev-Zeldovich scaling relations**.
Planck Collaboration et al., A&A, 536, A11. 1101.2026, December 2011

[179] **Planck early results. XII. Cluster Sunyaev-Zeldovich optical scaling relations**.
Planck Collaboration et al., A&A, 536, A12. 1101.2027, December 2011

[180] **Planck early results. XIII. Statistical properties of extragalactic radio sources in the Planck Early Release Compact Source Catalogue**.
Planck Collaboration et al., A&A, 536, A13. 1101.2044, December 2011

[181] **Planck early results. XIV. ERCSC validation and extreme radio sources**.
Planck Collaboration et al., A&A, 536, A14. 1101.1721, December 2011

[182] **Planck early results. XIX. All-sky temperature and dust optical depth from Planck and IRAS. Constraints on the "dark gas" in our Galaxy**.
Planck Collaboration et al., A&A, 536, A19. 1101.2029, December 2011

[183] **Planck early results. XV. Spectral energy distributions and radio continuum spectra of northern extragalactic radio sources**.
Planck Collaboration et al., A&A, 536, A15. 1101.2047, December 2011

[184] **Planck early results. XVI. The Planck view of nearby galaxies**.
Planck Collaboration et al., A&A, 536, A16. 1101.2045, December 2011

[185] **Planck early results. XVII. Origin of the submillimetre excess dust emission in the Magellanic Clouds**.
Planck Collaboration et al., A&A, 536, A17. 1101.2046, December 2011

[186] **Planck early results. XVIII. The power spectrum of cosmic infrared background anisotropies**.
Planck Collaboration et al., A&A, 536, A18. 1101.2028, December 2011

[187] **Planck early results. XX. New light on anomalous microwave emission from spinning dust grains**.
Planck Collaboration et al., A&A, 536, A20. 1101.2031, December 2011

[188] **Planck early results. XXI. Properties of the interstellar medium in the Galactic plane**.
Planck Collaboration et al., A&A, 536, A21. 1101.2032, December 2011

[189] **Planck early results. XXII. The submillimetre properties of a sample of Galactic cold clumps**.
Planck Collaboration et al., A&A, 536, A22. 1101.2034, December 2011

[190] **Planck early results. XXIII. The first all-sky survey of Galactic cold clumps**.
Planck Collaboration et al., A&A, 536, A23. 1101.2035, December 2011

[191] **Planck early results. XXIV. Dust in the diffuse interstellar medium and the Galactic halo**.
Planck Collaboration et al., A&A, 536, A24. 1101.2036, December 2011

[192] **Planck early results. XXV. Thermal dust in nearby molecular clouds**.
Planck Collaboration et al., A&A, 536, A25. 1101.2037, December 2011

[193] **Planck early results. XXVI. Detection with Planck and confirmation by XMM-Newton of PLCK G266.6-27.3, an exceptionally X-ray luminous and massive galaxy cluster at z ~1**.
Planck Collaboration et al., A&A, 536, A26. 1106.1376, December 2011

[194] **Planck early results. IV. First assessment of the High Frequency Instrument in-flight performance**.
Planck HFI Core Team et al., A&A, 536, A4. 1101.2039, December 2011

[195] **Planck early results. VI. The High Frequency Instrument data processing**.
Planck HFI Core Team et al., A&A, 536, A6. 1101.2048, December 2011

[196] **Iterative destriping and photometric calibration for Planck-HFI, polarized, multi-detector map-making**.
M. Tristram, C. Filliard, O. Perdereau, S. Plaszczynski, R. Stompor and F. Touze, A&A, 534, A88. 1103.2281, October 2011

[197] **Measurement of the Crab nebula polarization at 90 GHz as a calibrator for CMB experiments**.
J. Aumont et al., A&A, 514, A70. 0912.1751, May 2010

[198] **Planck pre-launch status: The HFI instrument, from specification to actual performance**.
J. M. Lamarre et al., A&A, 520, A9. September 2010

[199] **Planck pre-launch status: HFI ground calibration**.
F. Pajot et al., A&A, 520, A10. September 2010

[200] **EBEX: a balloon-borne CMB polarization experiment**.
B. Reichborn-Kjennerud et al. In W. S. Holland and J. Zmuidzinas (Editors), Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy V, volume 7741 of **Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series**, 77411C. July 2010. 1007.3672

[201] **Planck pre-launch status: High Frequency Instrument polarization calibration**.
C. Rosset et al., A&A, 520, A13. 1004.2595, September 2010

[202] **Maximum likelihood, parametric component separation and CMB B-mode detection in suborbital experiments**.
F. Stivoli, J. Grain, S. M. Leach, M. Tristram, C. Baccigalupi and R. Stompor, MNRAS, 408, 4, 2319. 1004.4756, November 2010

[203] **Planck pre-launch status: The optical system**.
J. A. Tauber et al., A&A, 520, A2. September 2010

[204] **Planck pre-launch status: The Planck mission**.
J. A. Tauber et al., A&A, 520, A1. September 2010

[205] **The Origin of the Universe as Revealed Through the Polarization of the Cosmic Microwave Background**.
S. Dodelson et al. In astro2010: The Astronomy and Astrophysics Decadal Survey, volume 2010, 67. January 2009. 0902.3796

[206] **Polarized CMB power spectrum estimation using the pure pseudo-cross-spectrum approach**.
J. Grain, M. Tristram and R. Stompor, Phys. Rev. D, 79, 12, 123515. 0903.2350, June 2009

[207] **Nonlinear preheating with scalar metric perturbations**.
M. Bastero-Gil, M. Tristram, J. Macias-Pérez and D. Santos, Phys. Rev. D, 77, 2, 023520. 0709.3510, January 2008

[208] **Submillimetre point sources from the Archeops experiment: very cold clumps in the Galactic plane**.
F. X. Désert et al., A&A, 481, 2, 411. 0801.4502, April 2008

[209] **Testing Gaussianity on Archeops data**.
A. Curto, J. Aumont, J. F. Macías-Pérez, E. Martínez-González, R. B. Barreiro, D. Santos, F. X. Désert and M. Tristram, A&A, 474, 1, 23. astro-ph/0612148, October 2007

[210] **Archeops in-flight performance, data processing, and map making**.
J. F. Macías-Pérez et al., A&A, 467, 3, 1313. astro-ph/0603665, June 2007

[211] **Data analysis methods for the cosmic microwave background**.
M. Tristram and K. Ganga, Reports on Progress in Physics, 70, 6, 899. 0708.1429, June 2007

[212] **Spectral indications of thermal Sunyaev-Zel'dovich effect in ARCHEOPS and WMAP data**.
C. Hernández-Monteagudo, J. F. Macías-Pérez, M. Tristram and F. X. Désert, A&A, 449, 1, 41. astro-ph/0506530, April 2006

[213] **Temperature and polarization angular power spectra of Galactic dust radiation at 353 GHz as measured by Archeops**.
N. Ponthieu et al., A&A, 444, 1, 327. astro-ph/0501427, December 2005

[214] **XSPECT, estimation of the angular power spectrum by computing cross-power spectra with analytical error bars**.
M. Tristram, J. F. Macías-Pérez, C. Renault and D. Santos, MNRAS, 358, 3, 833. astro-ph/0405575, April 2005

[215] **The CMB temperature power spectrum from an improved analysis of the Archeops data**.
M. Tristram et al., A&A, 436, 3, 785. astro-ph/0411633, June 2005

[216] **First detection of polarization of the submillimetre diffuse galactic dust emission by Archeops**.
A. Benoît et al., A&A, 424, 571. astro-ph/0306222, September 2004

[217] **ASYMFAST: A method for convolving maps with asymmetric main beams**.
M. Tristram, J. F. Macías-Pérez, C. Renault and J. C. Hamilton, Phys. Rev. D, 69, 12, 123008. astro-ph/0310260, June 2004

[218] **Cosmological constraints from Archeops**.
A. Benoît et al., A&A, 399, L25. astro-ph/0210306, March 2003

[219] **The cosmic microwave background anisotropy power spectrum measured by Archeops**.
A. Benoît et al., A&A, 399, L19. astro-ph/0210305, March 2003

tristram@ijclab.in2p3.fr
https://users.lal.in2p3.fr/tristram

Conferences

1. **CMB-France #5**
   Dec 2023, Paris (France)
   oral presentation : *Cosmological parameters derived from the final Planck data release (PR4)*

2. **Colloque Dark Energy #7**
   Nov 2023, Annecy (France)
   oral presentation : *Planck PR4 results*

3. **PONT 2023**
   May 2023, Avignon (France)
   oral presentation : *Future science with the CMB*

4. **CMBxLSS**
   April 2023, Kyoto (Japan)
   oral presentation : *Planck PR4 results*

5. **Colloque Dark Energy #6**
   November 2022, Marseille (France)
   oral presentation : *Neutrinos in Cosmology*

6. **Colloque Dark Energy #5**
   October 2021, Paris (France)
   oral presentation : *Planck constraints on the tensor to scalar ratio*

7. **Sixteenth Marcel Grossmann Meeting**
   July 2021, in remote
   oral presentation : *Planck constraints on the tensor to scalar ratio*

8. **Journées SF2A 2021**
   June 2021, in remote
   oral presentation : *CMB in relative tension*

9. **CMB-France #1**
   June 2021, in remote
   oral presentation : *Planck constraints on the tensor to scalar ratio*

10. **Theory meeting experiments (TMEX-2020)**
    January 2020, Quy-Nhon (Vietnam)
    oral presentation : *LiteBIRD*

11. **Colloque Dark Energy**
    November 2019, Paris (France)
    oral presentation : *CMB in (relative) tensions*

12. **LSS2LSS**
    July 2018, Orsay (France)
    oral presentation : *Cosmology with the CMB*
    oral presentation : *CMB reionization constraints*

13. **Designing Future CMB Experiments**
    March 2018, Caltech University (USA)
    oral presentation : *Planck systematics*

14. **Cosmo17**
    August 2017, Paris (France)
    oral presentation : *Tensions related to the lensing of CMB power spectra*

15. **CosPA 2016**
    November 2016, Sydney (Australia)
    oral presentation : *PLANCK large scale polarization*
    oral presentation : *Planck likelihoods and the AL parameter*

16. **B-modes from space**
    December 2015, Tokyo (Japon)
    oral presentation : *large scale polarization: maps and low-l analysis*

17. **Future of Polarimetry**
    September 2015, Bruxelles (Belgique)
    oral presentation : *Planck observations of CMB polarisation*

18. **IAU XXIX general assembly**
    August 2015, Hawaii (USA)
    oral presentation : *The impact of Planck on reionisation*

19. **Cosmology with the CMB and its polarization**
    January 2015, Minneapolis (USA)
    oral presentation : *PLANCK large scale polar*

20. **CMB 2013**
    10-14 June 2013, Okinawa (Japon)
    oral presentation sur invitation : *PLANCK first cosmological results*

21. **ESLAB 2013**
    2-5 April 2013, ESA/ESTEC, Noordwijk (The Netherlands)
    oral presentation : *Planck polarisation status and small scales*

22. **Polarised foreground for CMB**
    26-28 November 2012, Max-Planck-Institut für Astrophysik, Garching (Germany)
    oral presentation : *Methods for B-mode detection*

23. **Moriond 2010 “Cosmology”**
    13-20 March 2010, La Thuile (Italie)
    oral presentation : *B-mode CMB spectrum estimation*

24. **Planck Optics “from ground measurement to scientific implications"**
    2-5 December 2006, Paris (France)
    oral presentation sur invitation : *Archeops Optics*

25. **CMB and Physics of the Early Universe**
    20-22 April 2006, Ischia, (Italie)
    poster : *Xspect / Xpol : CMB angular power spectra estimator using cross-correlation*

26. **Polarisation 2005 “Sky polarisation at far-infrared to radio wavelengths”**
    12-15 September 2005, Orsay (France)
    oral presentation : *Polarized angular power spectra of galactic dust radiation measured by Archeops*

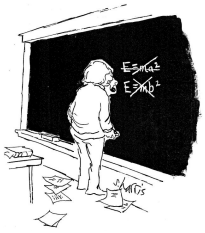
27. **Cosmo04 “International Workshop on Particle Physics and the Early Universe”**
    17-21 September 2004, Toronto (Canada)
    oral presentation : *Archeops Improved Results on Angular Power Spectrum*

28. **XXth IAP Colloquium "CMB Physics and Observation"**
    28 June-2 July 2004, Paris (France)
    oral presentation : *Archeops improved results on angular power spectrum*

29. **Moriond 2004 "Exploring the Universe"**
    28 March-4 April 2004, La thuile (Italie)
    oral presentation : *Archeops improved results on angular power spectrum*

30. **Multiwavelength Cosmology**
    17-20 July 2003, Mykonos Island, Greece
    oral presentation : *Archeops: a tool for present and future cosmology*,
    publié chez Kluwer Academic Publishers, Ed. M. Plionis, p.97

tristram@ijclab.in2p3.fr
https://users.lal.in2p3.fr/tristram



Seminars

Kavli IPMU - Kavli Institute for the Physics and Mathematics of the Universe Tokyo, 29 October 2020 (remote)
Planck constraints on the tensor to scalar ratio

Stanford University California, 13 October 2020 (remote)
Planck constraints on the tensor to scalar ratio

ESTEC - European Space Research and Technology Centre Noordwijk, 31 March 2017
PLANCK constraints on reionization history

IPAG - Institut de Planétologie et d'Astrophysique de Grenoble Grenoble, 26 February 2015
PLANCK cosmological first results

LAM - Laboratoire d'Astrophysique de Marseille Marseille, 5 June 2013
PLANCK cosmological first results

IPNL - Institut Physique Nucléaire de Lyon Lyon, April 2013
PLANCK premier résultats cosmologiques

LAPP - Laboratoire d'Annecy-le-vieux de Physique des Particules Annecy, 5 November 2010
PLANCK status and performance

LPSC - Laboratoire de Physique Subatomique et de Cosmologie Grenoble, 15 March 2007
analyse des anisotropies du CMB: une sonde pour la cosmologie

LAL - Laboratoire de l'Accélérateur Linéaire Orsay, 30 January 2007
L'analyse de données CMB

LPNHE - Laboratoire de Physique Nucléaire et de Hautes Energies Paris, 23 March 2006
Mesure des anisotropies du CMB : Archeops, WMAP and Planck

IAP - Institut d'Astrophysique de Paris Paris, 21 March 2006
Mesure des anisotropies du CMB : Archeops, WMAP and Planck

IReS - Institut de Recherche Subatomique Strasbourg, 24 February 2006
Mesure des anisotropies du CMB : Archeops, WMAP and Planck

IPNL - Institut Physique Nucléaire de Lyon Lyon, 10 February 2006
Mesure des anisotropies du CMB : Archeops, WMAP and Planck

LPTA - Laboratoire de Physique Théorique et Astroparticules Montpellier, 13 June 2005
Mesure des anisotropies du CMB avec Archeops

LPSC - Laboratoire de Physique Subatomique et de Cosmologie Grenoble, 2005
Archeops 1998 - 2005

tristram@ijclab.in2p3.fr
https://users.lal.in2p3.fr/tristram

Outreach

- **Meeting Organisation**
  Workshop CMB-France (June 2021, November 2021)
  From Planck to the future of CMB (23 - 27 May 2022, Ferrara, Italy)
- **Interview journal**
  Ciel & Espace (Julien Bourdet, Apr 2020)
  Science & Vie (Benoit Rey, Nov 2017)
  PhysicWorld (Keith Cooper, Sept 2016)
  l'Express (Victor Garcia, Sept 2016)
  Science & Vie ("Rayonnement fossile : il abrite un nouveau mystère", A. Orliac, Apr 2009)
- **Press-Release**
  De nouvelles limites sur les premiers instants de l?Univers (Jan 2021) ESA ("First stars formed even later than previously thought", ESA, Aug 2016)
- **Creating and maintaining public website**
  ARCHEOPS: *archeops.planck.fr*
  CMB@IJClab: *cmb.lal.in2p3.fr*
  LiteBIRD-France: *litebird.in2p3.fr*
  Participation to PLANCK: *www.planck.fr*
  Animator for Wikipedia
- Participation to the animation of the general public "La Ville Euroéenne des Science" (Grand-Palais, Paris, 2008)
- Animation of débat-rencontre with students from Joseph Fourier University (Grenoble, 2003)
- Participation to "fêtes de la science" (2000-2010 annually)